Regulating the Food Industry: An Aspirational Agenda

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See also Manzar, p. 859.

The coronavirus pandemic reveals an urgent need: the marketing of ultra-processed “junk” food must be stopped. Until now, the food industry has gotten away with pushing consumption of high-calorie, highly processed products—as often and in as many places as possible, and in increasingly large amounts—all in the name of profit. In this business-first food environment, obesity and its associated type 2 diabetes, coronary heart disease, and, these days, severe outcomes from COVID-19, are collateral damage. Because poor health more strongly affects the most vulnerable members of society, public health advocates ought to be demanding immediate, forceful government action to discourage food industry production and marketing of unhealthful products.

Ultra-processed foods are those constructed from industrially produced ingredients unavailable in home kitchens and formulated to be “addictively” delicious (“you can’t eat just one”). Box 1 gives my working definition. Familiar examples are carbonated soft drinks, flavored chips, children’s cereals, chicken and fish “nuggets,” and products with long lists of additives.

We have the evidence: ultra-processed products promote excessive calorie intake and poor health. Many recent studies associate frequent consumption of ultra-processed foods with elevated risks of chronic disease and overall mortality. And, in what I consider to be the most important nutrition study done in decades, a clinical trial conducted in a controlled metabolic ward at the National Institutes of Health compared the effects of consuming two nutritionally similar diets differing only in their degree of processing. The result: when study participants were offered ultra-processed diets, as opposed to diets constructed of minimally processed foods, they consumed an astonishing average of 500 more calories a day and gained commensurate amounts of weight. Participants judged the diets equally palatable and were unaware of overeating when presented with ultra-processed foods. These findings make a strong case for regulation.

HISTORY SINCE 1980

Centers for Disease Control and Prevention data demonstrate an increase in the prevalence of combined overweight and obesity among adults, from 47% in 1980 to 74% in 2018, and among children from 15% to 35%, with higher levels among those who are Black, Hispanic, or socioeconomically disadvantaged. We can argue about the precise cutpoints for increased health risk, but, by current body mass index standards, overweight is now normal for adults and becoming so for children.

What happened in about 1980 to promote so sharp an increase in weight gain? Genetics did not change; neither did thermodynamics. From the standpoint of thermodynamics, weight gain occurs when energy intake exceeds expenditure. Whether energy expenditure decreased significantly from 1980 on is debatable, but energy intake most definitely increased and by enough calories a day to account for the 10- to 20-pound average weight gain from 1980 to 2000. What did change was the food environment, and in ways that encouraged people to eat more food.

Food companies marketed wider availability of their products, even in places never previously permitted such as libraries, bookstores, and clothing stores, and they promoted frequent snacking (more calories). Because the cost of food is low relative to that of labor, transportation, and rent, restaurants could increase portion sizes, as could companies making ultra-processed products. Larger portions promote greater calorie intake in three ways: they provide more calories, they encourage greater calorie consumption, and they mislead people into underestimating how much they are eating. Obesity prevalence rose in parallel with increasing portion sizes.

The low prices of ultra-processed foods also encourage overconsumption. Since 1980, the prices of all foods have risen with inflation, but those of soft drinks and snacks rose much less than average, whereas fruits and vegetables became relatively more expensive. Low food prices democratize eating in fast-food and other
In contrast with foods that are unprocessed or minimally processed, ultra-processed products are
- Not obviously related to the whole foods from which they were derived
- Formulated with industrially produced ingredient additives (e.g., colors, flavors, sweeteners, texturizers) not usually available in supermarkets
- Unable to be made in home kitchens
- Formulated to be hyperpalatable (“addictive”)
- Heavily marketed
- Attractively and conveniently packaged
- Relatively inexpensive
- Highly profitable

Note. Selected examples: Coca-Cola, Tang, Doritos, Oreos, Froot Loops, Spam, chicken nuggets, most commercial ice creams.
Source. Adapted from Monteiro et al.4

restaurants where portions are large and more calories are consumed.

FOOD INDUSTRY GROWTH IMPERATIVES

I attribute the causes of intensified food industry marketing since 1980 to policy shifts in three areas: agriculture, Wall Street, and food regulation. Historically, Farm Bills paid agricultural producers to leave parts of their land unplanted as a means to prevent overproduction and maintain crop prices high enough for farmers to make a living. But when Earl Butz became US Department of Agriculture Secretary in the early 1970s, he shifted policies from supply management to rewarding farmers for producing as much food as possible. Farmers responded. Between the late 1970s and 2000, the calories available in the food supply per capita—amounts produced domestically, plus imports, less exports—rose from about 3200 per day to 4000, an amount roughly twice what the population needs on average.14 Caloric overabundance forced food companies to compete fiercely for sales.

Changes on Wall Street forced even greater competition. The early 1980s marked the advent of the shareholder value movement, which demanded higher and more immediate returns on investment. Never mind slow-earning blue-chip stocks; companies now had to report growth in profits every 90 days.15 For food companies, expanding sales in the face of 4000 calories a day per capita was a difficult challenge. To meet it, they developed new products, promoted snacking, expanded fast-food outlets, sold food in new venues, and increased portion sizes.

These efforts were supported by the antiregulatory policies of the Reagan administration, which allowed health claims on food packages and more aggressive marketing to children. Food companies increasingly targeted marketing to children. Food companies increasingly targeted marketing to children, to people of low socioeconomic status, to racial minorities, and to populations in low-income countries.16,17

In creating this “eat more” food environment, the food industry had only one goal: to increase sales. Food companies are not social service or public health agencies; they are businesses required to put stockholder earnings as their first priority.13 They did not intentionally promote weight gain, and they saw no reason to take responsibility for it. They could blame excessive weight gain on personal choice and externalize the substantial personal and medical costs of its consequences.

US POLICY PROPOSALS

During the 1980s and 1990s, calls for policy approaches to prevent excessive weight gain focused mainly on personal responsibility. But, in 2000, Michael Jacobson and I, recognizing the food industry’s role in weight gain, recommended measures such as taxes and advertising restrictions that would improve the environment of food choice.18 In 2001, the Surgeon General called for obesity policies to reduce racial, ethnic, gender, and age disparities and stigma; to encourage food companies to provide foods and beverages in reasonable portion sizes; and to examine its marketing practices (my emphasis).19

Federal Dietary Guidelines for Americans explicitly target personal choice: they advise individuals to reduce consumption of sugar, salt, and saturated fat. The 2020 guidelines do not mention “ultra-processed” except indirectly: “Food manufacturers and retail establishments can support Americans . . . by providing healthy options in all the places where foods and beverages are purchased. . . . Portion sizes also can be reduced. . . . Food manufacturers are encouraged to consider the entire composition of the food or beverage, and not just individual nutrients or ingredients when developing or reformulating products” (again, my emphasis).20(p50)

Since 1980, the Public Health Service Healthy People objectives for nutrition and weight status also mainly focused on personal choice but are now beginning to address the need for
environmental improvements. The 2020 objectives include modest goals for increasing the proportion of schools that exclude sugar-sweetened beverages and for increasing the number of states that provide incentives to retail outlets selling foods consistent with dietary guidelines. Current guidelines and health objectives not only ignore ultra-processed foods but also ignore three valiant but unsuccessful attempts to address the food industry’s role in childhood obesity (an easier target than in adults). In 2006, the Institute of Medicine published a remarkably hard-hitting report on food marketing to children. This report thoroughly documented the adverse effects of marketing on children’s food preferences, demands for branded products, eating habits, and body weight. It urged use of multiple policy approaches to prevent childhood obesity—agricultural subsidies, taxes, legislation, regulation, and nutrition education and assistance programs. It even warned that if food companies do not voluntarily stop marketing unhealthy foods to children, Congress should enact mandating legislation. But a follow-up workshop in 2013 identified only marginal improvements in food industry responses, noting that regulatory actions would face difficult political and legal barriers.

The second attempt was First Lady Michelle Obama’s Let’s Move! campaign to end childhood obesity within a generation, based on a 2010 report from the White House Task Force on Childhood Obesity appointed by President Obama. While the Task Force focused most of its policy recommendations on personal choice (dietary guidelines, food labels, calorie labels), it aimed several at the environment of food choice (portion sizes, school meal nutrition standards, farm-to-school programs, subsidies for healthier foods in food assistance programs, and economic incentives for fruit-and-vegetable production). “The food, beverage, and restaurant industries,” the report said, “should be encouraged [that word again] to use their creativity and resources to develop or reformulate more healthful foods for children and young people.”

One recommendation addressed food industry marketing. Echoing the Institute of Medicine report, the Task Force warned that if voluntary efforts to limit marketing did not yield substantial results, the Federal Communications Commission “could consider revisiting and modernizing rules.” Michelle Obama reinforced this idea in an eloquent speech to the Grocery Manufacturers Association: “We need you not just to tweak around the edges, but to entirely rethink the products that you’re offering, the information that you provide about these products, and how you market those products to our children.”

Let’s Move! did lead to improvements in school food. But its other major achievements—calorie labeling in fast-food outlets and improved food labels—addressed personal choice. The White House had no authority to force food company compliance with marketing or other public health measures that might reduce sales, and its efforts to promote even minimal regulation were consistently and effectively blocked by heavily funded, concerted opposition from the food industry.

The effectiveness of industry opposition was also evident from the third failed attempt, that of the Federal Trade Commission (FTC) to set nutrition standards for foods marketed to children. In 2009, Congress directed the FTC to establish an Interagency Working Group (IWG) to develop such standards. The IWG proposed upper limits for sugars and salt among other measures, but made them voluntary and did not require implementation for six years. Despite this generosity, the food industry viewed these proposals as far too restrictive and forced the FTC to back off from setting marketing standards.

These attempts took place before the COVID-19 pandemic exposed the increased risks posed by obesity and related chronic diseases and the disparities in their prevalence and before ultra-processed foods were recognized as a distinct category of foods and beverages. The categorical distinction is critical; it helps clarify policy needs.

**AN (ASPIRATIONAL) ADVOCACY AGENDA**

Antismoking advocates succeeded in reducing use of cigarettes through mass-media campaigns but also by creating an environment less conducive to smoking through higher prices, smoke-free policies, warning labels, and tobacco control programs that addressed socioeconomic disparities. Strategies for curbing food industry promotion of overeating could follow this model.

Changing the food environment is, of course, more complicated: we must eat to live. But taking action to reduce the wide availability and promotion of ultra-processed foods could help reduce the overall burden of diseases related to dietary practices as well as the socioeconomic disparities in these conditions. Encouraging personal choice of healthier diets is helpful but not sufficient; the food environment needs to encourage healthy choice and to discourage consumption of ultra-processed foods,
especially in large portions. Let us advocate the following:

- **Dietary guidelines** to unambiguously state “Avoid ultra-processed foods” or at least follow the lead of the American Heart Association: “Choose minimally processed foods instead of ultra-processed foods.” Note: US dietary guidelines directly influence federal food assistance, school, and child care feeding policies and programs.

- **Mass media campaigns** to help the public recognize ultra-processed foods, reduce (but not necessarily eliminate) their consumption, and understand the food industry’s role as a commercial determinant of poor health.

- **Taxes** on ultra-processed foods. Taxation of sugar-sweetened beverages is associated with reduced consumption and health improvements. Taxes could contribute to the nearly 20% reduction in sugar availability since 1999 and to strategies to reduce the cost of healthier foods.

- **Warning labels** on ultra-processed foods. Warnings about salt, sugar, saturated fat, and calories already affect a large percentage of these products, but recent suggestions for specific warning labels on ultra-processed foods deserve serious consideration (Figure 1).

- **Marketing restrictions.** As with cigarettes, legal authority is needed to consider plain packaging, curbs on television and social media advertising, restrictions on retail product placements, sales and service in schools and institutions, and other such measures, especially as directed toward children. The United Kingdom has started doing this, as have several countries in Latin America. We could too.

- **Portion size restrictions.** Before the pandemic, restaurant and fast-food meals accounted for at least half of Americans’ calorie intake. Mandating pre-1980 portions could help renormalize reasonable serving sizes.

- **Farm subsidies.** We should subsidize the production of healthy food for people and stop subsidizing feed for animals and fuel for automobiles.

Would policies like these stand a chance in today’s political and social context? They would confront formidable attitudinal, legal, and legislative hurdles. In the United States, lifestyle mandates of any kind are especially fraught (witness opposition to mask wearing). Food companies design and market ultra-processed products to be widely available, appealing, and inexpensive (hence, “addictive”); people love eating them and may not be able to afford healthier foods. The normalization of overweight only expands the proportion of the population likely to resist imposed measures.

Food companies and trade associations take advantage of resistance to “nanny-state” measures. They also invoke First Amendment protections. Just as the tobacco industry used its “playbook” tactics to oppose regulation of cigarettes, the food industry has forced the government to block dietary guidelines from addressing sustainability and weakened nutritional standards for pizza, potatoes, and tomato paste in schools. In such instances, and in soda companies’ willingness to spend fortunes to fight tax initiatives, the food industry has positioned itself as a prime example of how corporations can induce government to act in their—rather than in the public—interest.

These policy suggestions may seem unrealistic, but they are not impossible. Legal scholars have identified laws that could be tweaked to improve the environment of food choice, among them the Farm Bill (Pub L 115-334 [2018]) and regulations governing school nutrition standards. Even seemingly weak advocacy groups can harness their power to effect change when they share a compelling vision, organize community support, and build coalitions. Aspirational goals also have power. Unrealistic public health goals can motivate action, expand expectations,
educate, and attract resources; sometimes, they can even be achieved.37

While we are thinking in aspirational terms, let us not forget root causes. We must also demand policies that link agriculture to public health, keep corporate money out of politics, reduce corporate concentration, and require Wall Street to evaluate corporations on the basis of social as well as fiscal responsibility. In comparison with those challenges, taking on the food industry should be easy.

Let’s get to work.

[Note: For additional reading, please see the supplemental references, available as a supplement to the online version of this article at https://ajph.org.]

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